

REMARKS

Upon entry of the instant Amendment, claims 1-29 will be pending in the application. Claims 1, 17, 22, 24 and 25 are independent. By this amendment, claims 1, 17, 22 and 24-27 will have been amended. Support for the claim amendments can be found on at least page 5, lines 5-10 of the specification. No new matter is added. Reconsideration of the rejections in view of the above amendments and the following remarks is respectfully requested.

Present Amendment is proper for entry

Applicants respectfully submit that the instant amendment is proper for entry after final rejection. Applicants note that no question of new matter is presented nor are any new issues raised in entering the instant amendment of the claims and that no new search would be required. Moreover, Applicants submit that the instant amendment places the application in condition for allowance, or at least in better form for appeal. Accordingly, Applicants request the Examiner to enter the instant amendment, consider the merits of the same, and indicate the allowability of the present application and each of the pending claims.

Allowable Claims

Claims 17-21 were indicated to contain allowable subject matter and would be allowable is presented in independent form. Accordingly, as Applicants are presenting

claim 17 in independent form, Applicants respectfully request that at least claims 17-21 be indicated as allowed.

Objection to the Claims

Claims 26 and 27 were objected to because they recite the term “AOL” which is not defined in the specification. Applicants do not disagree and are, by the instant Amendment, amending claims 26 and 27 in an effort to address this basis of this objection. In particular, claims 26 and 27 have been amended to replace the undefined term “AOL” with the defined term “AOI”.

Accordingly, Applicants respectfully submit that the objection to the claims is now moot and should be withdrawn.

35 U.S.C. § 102 Rejection

Claims 1-8, 11-13, 16 and 22-29 were rejected under 35 U.S.C. § 102(b) for being allegedly anticipated by U.S. Patent No. 5,485,561 to IIZUKA et al. (incorrectly indicated by the Examiner as U.S. Patent No. 6,104,405).

In order to establish a *prima facie* case of anticipation under 35 U.S.C. § 102, a single prior art reference must disclose each and every element as set forth in the subject claim. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). Applicants respectfully submit that a *prima facie* case of anticipation cannot be established because IIZUKA fails to teach each and every element of the claims.

More particularly, independent claims 1, 22, 24 and 25 recite, *inter alia*, wherein the common framework provides that different recognition AOI systems, each using its own set of conventions for describing area information, is compatible with one another.

Applicants submit that IIZUKA does not disclose or even suggest this feature.

Applicants acknowledge, for example, that IIZUKA teaches a system and method which can replace an area of interest having a particular shape with another shape that uses coordinates of the initial shape (see col. 2, lines 23-60). Applicants also acknowledge that IIZUKA discloses various devices for accomplishing these functions (see col. 4, lines 12-30). However, Applicants respectfully submit that, contrary to the instant invention, IIZUKA does not disclose at least the above-noted features of claims 1, 22, 24 and 25, as amended.

Applicants note, for example, that IIZUKA is entirely silent with regard to the disclosed system using a common framework which ensures that different recognition AOI systems, each using its own set of conventions for describing area information, is compatible with one another. Indeed, IIZUKA discusses the disclosed system as being applicable to one system, i.e., an ultrasonic diagnostic system (see col. 1, lines 13-18). There is no apparent disclosure, or even any concern, in IIZUKA with regard to implementing the system on a common framework which provides that different recognition AOI systems, each using its own set of conventions for describing area information, is compatible with one another.

By way of background, the present invention implements the system and method on a common framework in order to ensure that different recognition AOI systems, each

using its own set of conventions for describing area information, is compatible with one another without the need for having a single convention. Indeed, page 5, lines 10-22 of the specification specifically indicates how this is accomplished using, among other things, a standard set of AOIs, hiding the actual AOI data behind handles, providing ways for the user to inform the AOI manager of assumptions, and completely decoupling the way in which the AOI is specified from the way in which it is accessed.

None of these aspects appear to be contemplated by the disclosure of IIZUKA which is merely concerned with replacing an area or region of interest with another area or region of interest having a different shape (see col. 1, lines 7-12).

Accordingly, Applicants respectfully submit that independent claims 1, 22, 24 and 25 as well dependent claims 2-8, 11-13, 16, 23 and 26-29, which depend from claims 1, 22, 23 and 25 are allowable.

Applicants note, in particular, that IIZUKA also fails to disclose, or even suggest:

- (i) that the first geometric shape is a same shape as the second geometric shape (claim 3).
- (ii) that the first geometric shape is more constrained than the second geometric shape (claim 5).
- (iii) that the bounding box is more constrained than the parallelogram, the rectangle and the polygon (claim 7).
- (iv) the step of translating the second geometric shape by a predetermined amount compared to the first geometric shape (claim 11).
- (v) the step of scaling the second geometric shape by a predetermined amount compared to the first geometric shape (claim 12).
- (vi) that the step of scaling is performed in at least one of a vertical (Y) and horizontal direction (X) (claim 13).

- (vii) that the step of defining the first geometric shape includes the steps of determining whether the first geometric shape includes one of:
 - (i) at least three points;
 - (ii) a distinct starting point, fast end point and a slow end point;
 - (iii) a non-zero distance between a starting point and a fast end point; and
 - (iv) a non zero area (claim 16).
- (viii) that the second AOI space has the same shape or is more constrained than the initial AOI space (claim 23).
- (ix) that the new AOI defines a bounded area shape and wherein, after the converting, the first geometric shape is bounded or constrained by the bounded area shape (claim 26).
- (x) that the second AOI space defines a bounded area shape and wherein, after the converting, the geometric shape is bounded or constrained by the bounded area shape (claim 27).
- (xi) that the system further comprises means for generating a bounded area shape, wherein the first geometric shape is bounded or constrained by the bounded area shape (claim 28).
- (xii) that the method further comprises generating a bounded area shape and wherein, after the converting, the first geometric shape is bounded or constrained by the bounded area shape (claim 29).

Accordingly, Applicants respectfully submit that the rejection under 35 U.S.C. § 102(b) should be withdrawn.

35 U.S.C. § 103 Rejection

Claims 9, 10, 14 and 15 were rejected under 35 U.S.C. § 103(a) for being allegedly unpatentable over IIZUKA in view of U.S. Patent No. 4,701,752 to WANG.

The Examiner acknowledges that IIZUKA lacks, among other things, rotating about an origin and mirroring points of the second geometric shape. However, the Examiner asserts that such features are taught or suggested by WANG and that it

would have been obvious to combine the teachings of these documents to achieve the claimed invention. Applicants respectfully submit that a *prima facie* case of obviousness has not been established as the applied references fail to teach each and every element of the claims.

Applicants submit that neither IIZUKA nor WANG disclose or suggest the combination of features recited in at least independent claim 1. Applicants also submit that no proper combination of these documents disclose or suggest the combination of features recited in at least claim 1.

As noted above, independent claim 1 recites, *inter alia*,

wherein the common framework provides that different recognition AOI systems, each using its own set of conventions for describing area information, is compatible with one another.

As explained above, while IIZUKA teaches a system and method which can replace an area of interest having a particular shape with another shape that uses coordinates of the initial shape (see col. 2, lines 23-60), and discloses various devices for accomplishing these functions (see col. 4, lines 12-30), IIZUKA is entirely silent with regard to the disclosed system using a common framework provides that different recognition AOI systems, each using its own set of conventions for describing area information, is compatible with one another. To the contrary, IIZUKA discusses the disclosed system as being applicable to one system, i.e., an ultrasonic diagnostic system (see col. 1, lines 13-18). There is no apparent disclosure, or even any concern, in IIZUKA with regard to implementing the system on a common framework which

ensures that different recognition AOI systems, each using its own set of conventions for describing area information, is compatible with one another.

With regard to WANG, Applicants acknowledge that WANG relates to a method of generating a mirror image of a graphic object (see abstract). Applicants do not dispute, for example, that WANG discloses that a graphic object 18 can be generated within a display edit window (see col. 3, lines 35-37) and that the object 18 can be selected and mirrored by the user using a computer system (see col. 3, line 50 to col. 4, line 9). However, Applicants respectfully submit that, contrary to the Examiner's assertions, WANG does not cure the deficiencies of IIZUKA and does not disclose or suggest at least the above-noted features of claim 1.

For example, WANG, like IIZUKA, is entirely silent with regard to implementing the disclosed system on a common framework which provides that different recognition AOI systems, each using its own set of conventions for describing area information, is compatible with one another. The disclosure in WANG with regard to mirroring an object on a computer system is not suggestive of using a common framework, much less, one which ensures that different recognition AOI systems, each using its own set of conventions for describing area information, is compatible with one another. The system in WANG merely allows a user to create an object and then mirror it. Moreover, WANG merely discloses that the code implementing the system can be written in program design language PDL (see col. 5, lines 3-6).

Thus, in addition to failing to disclose the combination of features recited in the claim 1, Applicants submit no proper combination of these documents discloses or

suggests the combination of features recited in claim 1 or in the above-noted claims which depend from claim 1.

Applicants note, in particular, that no proper combination of IIZUKA and WANG discloses or suggests, in combination with the steps of claim 1:

- (i) the step of rotating is performed about an origin (0,0) (claim 10).
- (ii) the step of mirroring points of the second geometric shape by a predetermined amount compared to the first geometric shape about one of a horizontal and vertical axis (claim 14).

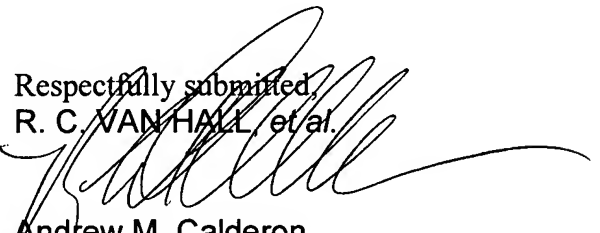
Accordingly, Applicants respectfully submit that the above-noted rejection under 35 U.S.C. § 103(a) should be withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed.

November 28, 2005
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
703-716-1191

Respectfully submitted,
R. C. VAN HALL, et al.


Andrew M. Calderon
Reg. No. 38,093

Robert W. Mueller
Reg. No. 35,043